

ABSTRACT OF THE DISCLOSURE

A fuel cell apparatus includes a heat exchange unit including a laminated structure, a water entrance provided at the laminated structure and
5 through which the water from the hot water storage unit flows into the laminated structure, and a water exit provided at the laminated structure and through which the water is discharged out of the laminated structure after the water passes through the laminated structure. The laminated structure is integrally formed into lamination by a heat exchanger for the
10 fuel cell cooling water for recovering heat in the fuel cell cooling water and at least any one of a first heat exchanger for eliminating moisture contained in the fuel-containing material through the heat exchange, a second heat exchanger for eliminating moisture contained in a fuel off-gas through the heat exchange, and a third heat exchanger for eliminating moisture
15 contained in an air off-gas through the heat exchange.